Replacement Sheet

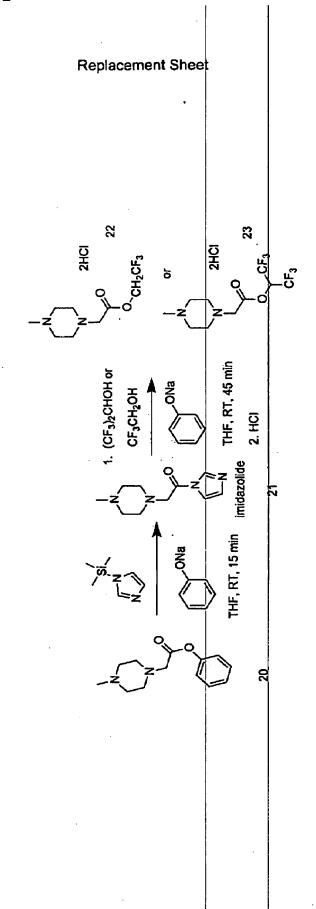
Figure 2AScheme A For The Synthesis Of N-Methyl Piperazine Acetic Acids

Scheme B For The Synthesis Of N-Methyl Piperazine Acetic Acids

Figure 2B

Figure 4A

Scheme A For The Synthesis Of Various Active Esters Of N-Methyl Piperazine Via Imidazolide Formation



Replacement Sheet

Figure 4B
Scheme B For The Synthesis Of Various Active Esters Of N-Methyl Piperazine
Via Oxallyl Chloride

1. (COCI)₂
1. (COCI)₂
1. (COCI)₂
N 30 min, RT
N 2. solv/reagent CiOC
Crushed to Solid powder 24 (TBD on solid support) isolated as foam

re 4C

Scheme C For The Synthesis Of Various Active Esters Of N-Methyl Piperazine Via Trifluroacetate Ester

Replacement Sheet Dioxane, HCI Dioxane. HCI DIPEA, THF